

224



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/403,011	10/15/1999	MITSURU UESUGI	PJ8583	6737

7055 7590 10/15/2004

GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

WEST, LEWIS G

ART UNIT PAPER NUMBER

2682

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/403,011

Applicant(s)

UESUGI ET AL.

Examiner

Lewis G. West

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

Applicant's arguments with respect to claims 12-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takai (US 5,771,451) in view of Gilhousen (US 5,943,014).

Regarding claim 12, Takai discloses a radio communication system comprising: a first base station (BSA, 1) from which a handover starts; a second base station (BSB, 2) at which the handover ends; and a mobile station (MS, 3) that combines a signal from said first base station and a signal from said second base station while the handover from said first base station to said second base station is in progress, wherein both said first base station and said second base station control power levels of the signals transmitted to said mobile station in accordance with a distance from said first base station and second base station to said mobile station (Col. 9 lines 43-53) such that, said first base station gradually reduces power levels of signals transmitted to said mobile station as said mobile station moves further from said first base station, and said second base station gradually increases power levels of signals transmitted to said mobile station as said mobile station moves closer to said second base station to keep the combined signal

Art Unit: 2682

obtained in said mobile station at a desired quality level. (Col. 9 line 8-col. 10 line 13), and discloses determining this distance based on a propagation factor, and therefore time and speed, speed being a constant in a telecommunications system, a time factor was inherently used to determine the distance. Takai does not expressly disclose finding distance based on a timing difference between uplink and downlink. Gilhousen discloses distance determined by differences in timing measurements at a base station, the difference in timing being the difference in the timing of an uplink and downlink signal for power control. (Col. 5 lines 43-64) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use timing difference to determine distance in a power control system in order to reduce unnecessary power and eliminate interference.

Regarding claim 13, the combination of Takai and Gilhousen discloses a base station for use in the radio communication system of claim 12, comprising: a receiver that receives a transmission power control signal transmitted from the mobile station; and a transmission power controller that controls a transmission power level of a downlink signal, (Col. 9 line 37-43, "base station control unit") in accordance with the transmission power control signal, such that said transmission power controller determines a distance from the base station to the mobile station based on a time difference between a transmission timing of a downlink signal and a reception timing of an uplink signal, and the transmission power level decreases as the mobile station moves further from the base station and the time difference increases. (Col. 10 lines 28-50)

Regarding claim 14, Takai discloses a communication method comprising: transmitting a signal from a first base station (BSA, 1) to a mobile station (MS, 3);

Art Unit: 2682

transmitting a signal from a second base station (BSB, 2) to the mobile station (MS, 3); processing a handover from the first base station to the second base station; combining the signal from the first base station and the signal from the second base station while the handover is in progress, wherein both the first base station and the second base station control power levels of the signals transmitted to the mobile station in accordance with a distance from the first base station and second base station to the mobile station (Col. 9 lines 43-53) such that, the first base station gradually reduces power levels of signals transmitted to the mobile station as the mobile station moves further from the first base station, and the second base station gradually increases power levels of signals transmitted to the mobile station as the mobile station moves closer to the second base station to keep the combined signal obtained in the mobile station at a desired quality level. (Col. 9 line 8-col. 10 line 13), and discloses determining this distance based on a propagation factor, and therefore time and speed, speed being a constant in a telecommunications system, a time factor was inherently used to determine the distance. Takai does not expressly disclose finding distance based on a timing difference between uplink and downlink. Gilhousen discloses distance determined by differences in timing measurements at a base station, the difference in timing being the difference in the timing of an uplink and downlink signal for power control. (Col. 5 lines 43-64) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use timing difference to determine distance in a power control system in order to reduce unnecessary power and eliminate interference.

Art Unit: 2682

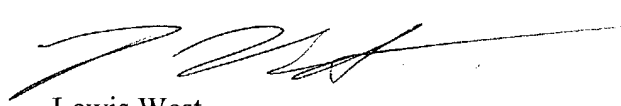
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis G. West whose telephone number is 703-308-9298.

The examiner can normally be reached on Monday-Thursday 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lewis West
(703) 308-9298



LEE NGUYEN
PRIMARY EXAMINER